

WHAT IS CLAIMED IS:

1 1. Footwear incorporating an illumination system, said footwear comprising:
2 a sole;
3 a translucent sole insert including at least one illumination device capable of
4 providing externally visible light;
5 a control processor capable of altering the visual characteristics of said externally
6 visible light provided by said illumination device; and,
7 a power source for providing power to said illumination device and said control
8 processor.

1 2. The footwear of claim 1 wherein said illumination device is a light emitting diode
2 (“LED”).

1 3. The footwear of claim 2 wherein said power source is a battery.

1 4. The footwear of claim 3 wherein said sole further includes mirror material located
2 behind said translucent sole insert for reflecting said externally visual light through said
3 translucent sole insert.

1 5. The footwear of claim 3 further including an effect device in said translucent sole
2 insert.

1 6. Footwear incorporating an illumination system, said footwear comprising:
2 a sole;
3 a U-shaped translucent sole insert including a sole illumination device capable of
4 providing externally visible light;
5 a heel;
6 a translucent heel insert including at least one heel illumination device capable of
7 providing externally visible light;
8 a control processor capable of altering the visual characteristics of said externally
9 visible light provided by said sole illumination device and said heel illumination device; and,

10 a power source for providing power to said sole illumination device, said heel
11 illumination device and said control processor.

1 7. The footwear of claim 6 wherein said illumination device is a light emitting diode
2 (“LED”).

1 8. The footwear of claim 7 wherein said power source is a battery.

1 9. The footwear of claim 8 wherein said sole further includes mirror material located
2 behind said translucent sole insert for reflecting said externally visual light through said
3 translucent sole insert.

1 10. The footwear of claim 9 wherein said heel further includes mirror material
2 located behind said translucent heel insert for reflecting said externally visual light through
3 said translucent heel insert.

1 11. The footwear of claim 8 further including an effect device in said translucent sole
2 insert.

1 12. Footwear incorporating an audio/visual system, said footwear comprising:
2 a sole;
3 a translucent sole insert including at least one illumination device capable of
4 providing externally visible light;

5 a speaker;

6 an audio/visual control processor capable of altering the visual characteristics of said
7 externally visible light provided by said illumination device, and, capable of generating an
8 audio signal displayed by said speaker; and,

9 a power source for providing power to said illumination and said audio/visual control
10 processor.

1 13. The footwear of claim 12 further comprising a pressure switch located in said
2 sole for activating said audio signal when pressure is exerted on said pressure switch by a
3 wearer of said footwear.

1 14. The footwear of claim 13 wherein said audio/visual control processor is
2 comprised of a microprocessor and programmable read-memory ("PROM").

1 15. Footwear incorporating an interactive illumination system, said footwear
2 comprising:

3 a sole;

4 a translucent sole insert including at least one illumination device capable of
5 providing externally visible light;

6 at least one sensor located in said sole for sensing information about the physical state
7 of a wearer;

8 a sensor control unit for processing said information about the physical state of said
9 wearer;

10 a control processor capable of altering the visual characteristics of said externally
11 visible light provided by said illumination device in response to the physical state of said
12 wearer; and,

13 a power source for providing power to said illumination device, sensor control unit
14 and said control processor.

1 16. The footwear of claim 15 wherein said sensor is a pulse monitor.

1 17. The footwear of claim 15 wherein said sensor is a temperature monitor.

1 18. The footwear of claim 15 further comprising:

2 a heel;

3 a translucent heel insert including at least one illumination device capable of
4 providing externally visible light;

5 at least one sensor located in said heel for sensing information about the physical state
6 of a wearer.

1 19. The footwear of claim 18 wherein said sensor is a pulse monitor.

1 20. The footwear of claim 18 wherein said sensor is a temperature monitor.